

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph on page 13 starting at line 25 with the following amended paragraph:

The control circuit may be a microprocessor, microcontroller, reduced-instruction set computer (RISC), or other control/processing device. In one embodiment of the invention, the control circuitry 426[[424]] is implemented using a microcontroller, which includes some internal storage such as a Flash ROM 428 or other storage/memory. The Flash 428 may be used to store program instructions for use on the microcontroller, and may also be used to store information such as data and variables used to process sensor information. Alternatively, some or all of the control circuitry 426[[424]] may be implemented using dedicated logic circuitry.

Please replace the paragraph on page 14 starting at line 3 with the following amended paragraph:

The control circuitry 426[[424]] can effect data transfers to the external memory 430, which serves as a sensor data logger. In one embodiment, the memory 430 is implemented using Flash memory. A memory controller 432 may be used to facilitate the data transfers. For example, the memory controller 432 may include Direct Memory Access (DMA) support, thereby allowing DMA transfers between the control circuitry 426[[424]] and the memory 430. The memory controller 432 may also support DMA transfers between the memory 430 and the interface 416. It is noted that the master process 402 has access to the memory 430, but is not necessarily communicating with the controller 426 in one embodiment of the invention.

Please replace the paragraph on page 14 starting at line 28 with the following amended paragraph:

The sensor interface(s) 506 provides an interface between the various internal and/or external sensors, and circuitry such as digital-to-analog converters (DACs) 526, analog-to-digital converters (ADCs) 528, frequency counters 530, and the like. In one embodiment, sensing circuitry 506, 526, 528, and 530[[520]] are implemented in a common ASIC 532, but this need not be the case. The digital information may communicate with the processor/controller 534 via an interface such as, for example, a UART or I²C interface or any other processor port. In one particular embodiment, the controller 534, RAM 536, Flash ROM 538, and UART/I²C circuitry 540 are associated with a functional cover controller 542, although this need not be the case. This may be the case where all or a portion of the sensor module 500A is embodied in a functional cover that can be physically situated to the housing of a mobile device.